

BOOK NOTICE

FAUTIN, DAPHNE GAIL, DOUGLAS J. FUTUYMA, and FRANCES C. JAMES. 1994. **Annual Review of Ecology and Systematics, Volume 25.** (ISSN 006-4162, hbk.). Annual Reviews, Inc., 4139 El Camino Way, Palo Alto, CA 94303-0139. \$47.00 US, \$52.00 elsewhere. 686 pp.

"Chapters in this volume directly relevant to application of ecological and systematic knowledge are those by Schulze et al., who apply new technology to some pressing global issues, Chambers and MacMahon, who compare natural and managed systems, and Leigh Brown and Holmes on HIV. Holt and Lawton and Kuris and Lafferty, among others, explicitly relate principles they discuss to human concerns. Linkages between and among chapters in this volume abound. Concern with evolution, the interface between ecology and systematics, is implicit in many chapters; it is explicit in those by Moran on complex life cycles, Moreno on genetic architecture, Raff et al. on metazoan phylogeny, and Vrijenhoek on unisexual fishes, and in that by Vermeij entitled "The Evolutionary Interaction among Species: Selection, Escalation, and Coevolution." "Three chapters concern systematics of particular groups, two of them plants—legumes by Doyle, and Mesembryanthemaceae by Ihlenfeldt." There are 25 chapters: 1) Algal Nutrient Limitation and the Nutrition of Aquatic Herbivores; 2) Genetic Architecture, Genetic Behavior, and Character Evolution; 3) Molecular Approaches to Population Biology; 4) Unisexual Fish: Model Systems for Studying Ecology and Evolution; 5) Cooperation and Conflict in the Evolution of Signal Interactions; 6) Evolutionary Biology of Human Immunodeficiency Virus; 7) Metapopulation Dynamics and Genetics; 8) Community Structure: Larval Trematodes in Snail Hosts; 9) The Evolutionary Interaction Among Species: Selection, Escalation, and Coevolution; 10) The Systematics of Coral Genus *Acropora*: Implications of New Biological Findings for Species Concepts; 11) A Day in the Life of Seed: Movements and Fates of Seeds and Their Implications For Natural and Managed Systems; 12) The Evolution of Vocalization in Frogs and Toads; 13) Phylogeny of the Legume Family: An Approach to Understanding the Origins of Nodulation; 14) Using DNA Sequences to Unravel the Cambrian Radiation of the Animal Phyla; 15) Genetics and Ecology of Whales and Dolphins; 16) Fisheries Ecology in the Context of Ecological and Evolutionary Theory; 17) Ecology and Evolution of Reproduction in Milkweeds; 18) The Nature and Consequences of Indirect Effects in Ecological Communities; 19) Integrative Approaches to Evolutionary Ecology: *Anolis* Lizards as Model Systems; 20) The Ecological Consequences of Shared Natural Enemies; 21) Diversification in an Arid World: The Mesembryanthemaceae; 22) Genetic Divergence, Reproductive Isolation, and Marine Speciation; 23) Adaptation and Constraint in Complex Life Cycles of Animals; 24) Male Parental Behavior in Birds; 25) Relationships Among Maximum Stomatal Conductance, Ecosystem Surface Conductance, Carbon Assimilation Rate, and Plant Nitrogen Nutrition: A Global Ecology Scaling Exercise. A subject index is included.